

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 091895435C
Source: TFWJ6
Date Processed by STIC: 5/11/15

ENTERED



IFW16

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/895,435C

DATE: 05/11/2005
 TIME: 08:51:04

Input Set : A:\29248-17.txt
 Output Set: N:\CRF4\05112005\I895435C.raw

3 <110> APPLICANT: STEWART, A. Francis
 4 ZHANG, Youming
 5 HALLET, Bernard
 7 <120> TITLE OF INVENTION: TYROSINE RECOMBINASE FOR GENETIC ENGINEERING
 9 <130> FILE REFERENCE: 29248/17
 11 <140> CURRENT APPLICATION NUMBER: US 09/895,435C
 12 <141> CURRENT FILING DATE: 2001-06-30
 14 <160> NUMBER OF SEQ ID NOS: 11
 16 <170> SOFTWARE: PatentIn version 3.3
 18 <210> SEQ ID NO: 1
 19 <211> LENGTH: 244
 20 <212> TYPE: DNA
 21 <213> ORGANISM: Bacillus thuringiensis
 23 <400> SEQUENCE: 1
 24 ggtaccgcca gcatttcgga aaaaaaccac gctaagaaaa tcagagttaa aaaatcagaa 60
 26 aatatatcat tattccttga cacatacatg ttctttttt atacaaaaaaa taatacaaca 120
 28 caatattaat tgttgttat taggtgttat aataaatata aatcttaggg tttaacgcaa 180
 30 cacaatttat cgataaataa atacttttag acgcaacaca atttatacac gcgaggaaa 240
 32 tcac 244
 35 <210> SEQ ID NO: 2
 36 <211> LENGTH: 116
 37 <212> TYPE: DNA
 38 <213> ORGANISM: Bacillus thuringiensis
 40 <400> SEQUENCE: 2
 41 taataacaaca caatattaat tgttgttat taggtgttat aataaatata aatcttaggg 60
 43 tttaacgcaa cacaatttat cgataaataa atacttttag acgcaacaca atttat 116
 46 <210> SEQ ID NO: 3
 47 <211> LENGTH: 32
 48 <212> TYPE: DNA
 49 <213> ORGANISM: Bacillus thuringiensis
 51 <400> SEQUENCE: 3
 52 taataacaaca caatattaat tgttgttat ta 32
 55 <210> SEQ ID NO: 4
 56 <211> LENGTH: 249
 57 <212> TYPE: DNA
 58 <213> ORGANISM: Bacillus thuringiensis
 60 <400> SEQUENCE: 4
 61 ggggtaccgc cagcatttcg gaaaaaaaaacc acgctaagaa aatcagagtt aaaaaatcag 60
 63 aaaaatatac attattccaa gacacataca gtgttttt ttataaaaa aataatacaa 120
 65 cacaatatta atttgtttgtt attaggttt ataataaata taaatctagg ggtttaacgc 180
 67 aacacaattt atcgataaat aaatactttt agacgcaaca caatttatag acgcggagga 240
 69 aatcacatg 249
 72 <210> SEQ ID NO: 5

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73 <211> LENGTH: 798
74 <212> TYPE: DNA
75 <213> ORGANISM: Bacillus thuringiensis
77 <400> SEQUENCE: 5
78 atggatgtt caaaacagtt ttcttcttat cttaaacaag agaataaaac cgagaacact 60
80 gttcaggat acacatcagg tattagacag tacataaaat ggttgaagg ttcctatgac 120
82 agaaaattga caaaaattgtt ccgcacaaaat atcttagagt acattagttt tttaaagaat 180
84 gtcaaaatgt tgaacgccaa gtcatttaac cacaagatta gtgccttgc taaatttaat 240
86 gaatttctaa tacagaaagg aagtcaacaa gatcaagtaa ttttatttata tgtaaaaaag 300
88 ttttacaaa gtgtgttaga ggataataac aaacgtattt atgcaatttgc cactctccta 360
90 gcatatacag gagtacgtat ttcaaggca ttatctatca aatgaatga cttcaattta 420
92 cagactgggg aatgtattat tcgaagtggaa aaggaggta aacaacgaat tgttattacta 480
94 aatagtaagg tacttagtgc tatcaaagat tatctcatcg atcgaaaaac atacagtaca 540
96 gcacatgaat ctccgtatct ttttattttagt aaaaagcgag aaaagctcgaa ccgtacggc 600
98 gtcaatcgta tcttaaatc atacaggaat gtttattactc cacaccaattt acgacacttc 660
100 ttctgtacga atgcaattca aaaaggattt agcattcatg aagttgcaaa tcaagctggg 720
102 cactctaaca tccatacgac actactttac acaaattccaa accaactgca gctaaaaat 780
104 aaaatggagc tcttataa 798

107 <210> SEQ ID NO: 6
108 <211> LENGTH: 265
109 <212> TYPE: PRT
110 <213> ORGANISM: Bacillus thuringiensis
112 <400> SEQUENCE: 6
114 Met Asp Val Ala Lys Gln Phe Ser Ser Tyr Leu Lys Gln Glu Asn Lys
115 1 5 10 15
118 Thr Glu Asn Thr Val Gln Gly Tyr Thr Ser Gly Ile Arg Gln Tyr Ile
119 20 25 30
122 Lys Trp Phe Glu Gly Ser Tyr Asp Arg Lys Leu Thr Lys Leu Tyr Arg
123 35 40 45
126 Gln Asn Ile Leu Glu Tyr Ile Ser Tyr Leu Lys Asn Val Lys Met Leu
127 50 55 60
130 Asn Ala Lys Ser Ile Asn His Lys Ile Ser Ser Leu Ala Lys Phe Asn
131 65 70 75 80
134 Glu Phe Leu Ile Gln Lys Gly Ser Gln Gln Asp Gln Val Ile Leu Leu
135 85 90 95
138 Asp Val Lys Lys Phe Leu Gln Ser Val Leu Glu Asp Asn Asn Lys Arg
139 100 105 110
142 Asn Tyr Ala Ile Ala Thr Leu Leu Ala Tyr Thr Gly Val Arg Ile Ser
143 115 120 125
146 Glu Ala Leu Ser Ile Lys Met Asn Asp Phe Asn Leu Gln Thr Gly Glu
147 130 135 140
150 Cys Ile Ile Arg Ser Gly Lys Gly Gly Lys Gln Arg Ile Val Leu Leu
151 145 150 155 160
154 Asn Ser Lys Val Leu Ser Ala Ile Lys Asp Tyr Leu Ile Asp Arg Lys
155 165 170 175
158 Thr Tyr Ser Thr Ala His Glu Ser Pro Tyr Leu Phe Ile Ser Lys Lys
159 180 185 190
162 Arg Glu Lys Leu Asp Arg Thr Val Val Asn Arg Ile Phe Lys Ser Tyr
163 195 200 205

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166 Arg Asn Val Ile Thr Pro His Gln Leu Arg His Phe Phe Cys Thr Asn
167   210           215           220
170 Ala Ile Gln Lys Gly Phe Ser Ile His Glu Val Ala Asn Gln Ala Gly
171   225           230           235           240
174 His Ser Asn Ile His Thr Thr Leu Leu Tyr Thr Asn Pro Asn Gln Leu
175   245           250           255
178 Gln Leu Lys Asn Lys Met Glu Leu Leu
179   260           265
182 <210> SEQ ID NO: 7
183 <211> LENGTH: 116
184 <212> TYPE: DNA
185 <213> ORGANISM: Bacillus thuringiensis
187 <400> SEQUENCE: 7
188 taataacaaca caatattaat tgtgttgtat taggtgttat aataaatata tatctagggg      60
190 tttaacgcaa cacaatttat cgataaataa atacttttag acgcaacaca atttat      116
193 <210> SEQ ID NO: 8
194 <211> LENGTH: 116
195 <212> TYPE: DNA
196 <213> ORGANISM: Bacillus thuringiensis
198 <400> SEQUENCE: 8
199 taataacaaca caatattaat tgtgttgtat taggtgttat aatatatata aatctagggg      60
201 tttaacgcaa cacaatttat cgataaataa atacttttag acgcaacaca atttat      116
204 <210> SEQ ID NO: 9
205 <211> LENGTH: 116
206 <212> TYPE: DNA
207 <213> ORGANISM: Bacillus thuringiensis
210 <220> FEATURE:
211 <221> NAME/KEY: N_region
212 <222> LOCATION: (33)..(64)
213 <223> OTHER INFORMATION: n = a, t, g, or #
215 <220> FEATURE:
216 <221> NAME/KEY: misc_feature
217 <222> LOCATION: (33)..(64)
218 <223> OTHER INFORMATION: n is a, c, g, or t
220 <220> FEATURE:
221 <221> NAME/KEY: N_region
222 <222> LOCATION: (81)..(100)
223 <223> OTHER INFORMATION: n = a, t, g, or #
225 <220> FEATURE:
226 <221> NAME/KEY: misc_feature
227 <222> LOCATION: (81)..(100)
228 <223> OTHER INFORMATION: n is a, c, g, or t
230 <400> SEQUENCE: 9
W--> 231 taataacaaca caatattaat tgtgttgtat tannnnnnnn nnnnnnnnnn nnnnnnnnnn      60
233 nnnnacgcaa cacaatttat nnnnnnnnnn nnnnnnnnnn acgcaacaca atttat      116
236 <210> SEQ ID NO: 10
237 <211> LENGTH: 124
238 <212> TYPE: DNA
239 <213> ORGANISM: Bacillus thuringiensis
  
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242 <220> FEATURE:
243 <221> NAME/KEY: N_region
244 <222> LOCATION: (33)..(74)
245 <223> OTHER INFORMATION: n = a, t, g, or #c
247 <220> FEATURE:
248 <221> NAME/KEY: misc_feature
249 <222> LOCATION: (33)..(74)
250 <223> OTHER INFORMATION: n is a, c, g, or t
252 <400> SEQUENCE: 10
W--> 253 taatacaaca caatattaat tgtgttgtat tannnnnnnnn nnnnnnnnnn nnnnnnnnnn 60
255 nnnnnnnnnn nnnnacgcaa cacaatttac gataaataaa tacttttaga cgcaacacaa 120
257 ttta 124
260 <210> SEQ ID NO: 11
261 <211> LENGTH: 134
262 <212> TYPE: DNA
263 <213> ORGANISM: Bacillus thuringiensis
265 <400> SEQUENCE: 11
266 taatacaaca caatattaat tgtgttgtat taggtgttat aataaatata aatctagggg 60
268 tttaacgcaa cacaatttac cgataaataaa atacttttag acgcaacacaa atttataagac 120
270 gcggaggaaa tcac 134

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/895,435C

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:9; N Pos. 33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52
Seq#:9; N Pos. 53,54,55,56,57,58,59,60,61,62,63,64,81,82,83,84,85,86,87,88
Seq#:9; N Pos. 89,90,91,92,93,94,95,96,97,98,99,100
Seq#:10; N Pos. 33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52
Seq#:10; N Pos. 53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72
Seq#:10; N Pos. 73,74

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/895,435C

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Input Set : A:\29248-17.txt
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L:231 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
M:341 Repeated in SeqNo=9
L:253 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
M:341 Repeated in SeqNo=10